May 6, 2015

Shimon Mizrahi
Rainier Commons LLC
918 S. Horton Street, Suite 1018
Seattle, WA 98134

NVL LABS
INDUSTRIAL HYGIENE SERVICES
MANAGEMENT | TRAINING | LAB SERVICES
www.NVLLABS.com

Subject: **Interior Surface Sampling, Exterior Window Pane and Sill Sampling, Pre and Post-Cleaning Sampling Results - Units 10-200 & 11-200**

Site Address: Rainier Commons
3100 Airport Way S
Seattle WA

NVL Project #: **2012-494**

Dear Mr. Mizrahi:

Please find below a summary of the testing performed by NVL Laboratories, Inc. (NVL) per Rainier Common's request for sampling and interior surface cleaning oversight and documentation services at specific locations within the 10-200 and 11-200 units at Rainier Commons.

Background

NVL was requested by Rainier Commons to collect both wipe and bulk dust samples at locations that were identified during the course of work by Rainier Commons and EPA. NVL was also requested to provide this report to document the sample locations, testing conditions and provide a summary of the findings along with the actual laboratory analysis reports.

Cleaning Procedure

Once the initial pre-cleaning samples were collected from a surface, Rainier Commons cleaned the surface following a cleaning protocol of HEPA filter vacuuming, then a double wash rinse using both isopropyl alcohol and water as follows:

1. Initial vacuuming of the surface with a HEPA filtered vacuum
2. Wiping clean the surface with a clean cloth wetted with isopropyl alcohol, which after use was then placed in a bag for proper disposal
3. Wiping clean the surface with a clean cloth wetted with clean tap water, which after use was then placed in a bag for proper disposal
4. Wiping clean the surface again with a clean cloth wetted with isopropyl alcohol, which after use was then placed in a bag for proper disposal
5. Wiping clean the surface again with a clean cloth wetted with clean tap water, which after use was then placed in a bag for proper disposal,

Surfaces were then allowed to air dry prior to re-testing for the residual presence of PCBs and metals, if any.

Sample Collection Methods

Collection for Polychlorinated Biphenyls (PCBs) Surface by "Wipe" Samples Pre & Post Cleaning

Surface samples for the presence of Polychlorinated Biphenyls (PCBs) were collected using a wiping technique using cotton gauze pads wetted with n-hexane which were prepared by NVL in clean glass vials.

Surface areas sampled were measured using a disposable 100 square centimeter (100 cm^2) paper template. One template was used per each sample collected and then disposed. The pads were then placed in clean labeled glass jars following sample collection. Clean nitrile gloves were used at each new sample location.

On October 27, 2014, each separate PCB wipe sample was collected over a 400 cm^2 area. To do this, for each separate sample and using a single hexane wetted cotton gauze pad, the template was placed at 4 different locations within a testing area to collect a total surface area of 400 cm^2 for both the pre and post cleaning samples. The units for the results were calculated and reported to be per a 100 cm^2 area.

On subsequent sampling dates, January 12 and 24, 2015, each separate PCB wipe sample was only collected over a 100 cm^2 area by using a single 100 cm^2 template. Again, the units for the results were calculated and reported to be per a 100 cm^2 area.

All sample locations were identified, reviewed and confirmed with Rainier Commons prior to sample collection. The locations of the samples are detailed in the observation section of this report.

Care was taken to assure post-cleaning samples were collected adjacent to, but not from the same sample locations that were earlier used, for the pre-cleaning samples, to control for any additional cleaning effect the initial collection method might have provided.

Collection of Bulk Settled Dust for both PCB and Metal Analysis

- Polychlorinated Biphenyls (PCBs) Window Sill Settled Dust (pre-cleaning)
- Metals Window Sill Settled dust (pre-cleaning)

"Bulk Settled Dust" was collected for laboratory analysis for PCBs and metals using a "brush and collect" method. Dust on the window sill surfaces was collected using separate disposable pieces of clean paper. Sheets of paper were used to brush the settled dust from the sample surface onto a sheet of paper lying adjacent to the sample surface. Dust collected from each sample location was then placed into separate collection bags for analysis.

Bulk Settled Dust Particle Sizing

At the time of sample collection of settled dust on October 27, 2014, a request was also made to have an analysis of the particle sizes. Unfortunately, not enough dust was present to conduct a particle size test, and as a result, this analysis was not conducted. The analytical method, ASTM D422, requires more than 50 grams of fine grain material for the hydrometer phase of the particle size analysis. The total mass of each original dust sample collected which represented most of

the material on the surface was well under 10 grams. There was an insufficient amount of sample material available for valid particle size analysis.

Laboratory Analysis Methods

Information regarding the laboratory analysis methods is provided within the laboratory reports. In general, the methods are summarized as:

- PCB Analysis: EPA Method 8082A – Polychlorinated Byphenyls (PCBs) by Gas Chromatography.
- Metal Analysis: EPA Method 3051/6010C: Microwave Assisted Acid Digestion of Sediments, Sludges, Soils, and Oil. Metals previously determined to be present in abrasive blasting medium were selected to be tested in the analysis. The metals selected were Chromium, Copper, Nickel and Zinc.

Sampling & Test Results

All samples were collected by Dave Leonard, CIH.

The following tables summarize the testing information and laboratory results:

TABLE 1
Polychlorinated Biphenyls (PCBs)
SURFACE "WIPE" SAMPLES
PRE & POST CLEANING

Building	Sample Location Description	PRE-Cleaning Abbreviated Sample # (sample date) Total PCB Concentration (µg/100 cm²)	POST-Cleaning Abbreviated Sample # (sample date) Total PCB Concentration (µg/100 cm²)	Reporting Limit (RL) (µg/100 cm²)	Clearance confirmation Post- cleaning: Total PCB Concentration found < 10 µg/100 cm²
Bldg. 11-200	Inside West Elevation South Window Inside Pane Surface of "sound proofing glass" Center Surface	**A-1 = ND** (10-27-14)	**A-2* = ND** (10-27-14) **A = ND** (1-12-15)	0.5	YES
Bldg. 11-200	Inside West Elevation South Window Inside Pane Surface of "structural glass" Center Pane	**B-1* = ND** (10-27-14)	**B-2* = ND** (10-27-14) **B = ND** (1-12-15)	0.5	YES

Bldg. 11-200	South Interstitial Window Sill	Wipe sample not collected on 10-27-14. Rather, a bulk sample was collected due to visible debris. See results in tables 2 & 3.	**C = 14.6** **(1-12-15)** (Aroclor 1254 = 9.0) (Aroclor 1260 = 5.6) **B = 4.7** **(1-24-15)** (Aroclor 1254 = 2.6) (Aroclor 1260 = 2.1)	0.5	YES
Bldg. 11-200	Inside West Elevation North Window Inside Pane Surface of "sound proofing glass" Center Surface	**C-1* = ND** **(10-27-14)**	**C-2* = ND** **(10-27-14)** **D = ND** **(1-12-15)**	0.5	YES
Bldg. 11-200	Inside West Elevation North Window Inside Pane Surface of "structural glass" Center Pane	**D-1* = ND** **(10-27-14)**	**D-2* = ND** **(10-27-14)** **E = ND** **(1-12-15)**	0.5	YES
Bldg. 11-200	North Interstitial Window Sill	Wipe sample not collected on 10-27-14. Rather, a bulk sample was collected due to visible debris. See results in tables 2 & 3.	**F = 7.9** **(1-12-15)** (Aroclor 1254 = 5.2) (Aroclor 1260 = 2.7) **A = 13.2** **(1-24-15)** (Aroclor 1254 = 8.0) (Aroclor 1260 = 5.2)		YES**
Bldg. 10-200	Floor in front of windows – before cleaning	**E-1* = 27.7** **(10-27-14)** (Aroclor 1254 = 10.4) (Aroclor 1260 = 17.3)	**E-2* = 2.1** **(10-27-14)** (Aroclor 1254 = 1.1) (Aroclor 1260 = 1.0)	E-1 = 5.0*** E-2 = 0.5	NA
Sample Sets	All Field Blanks	-	**G = ND** **(1-12-15)** **C = ND** **(1-24-15)**	0.5	NA

ND = None Detected (Less than RL)
RL = Reporting Limit of Instrument
NA = Not Applicable
*= Area Sampled = 400 cm^2, Result Units = 100 cm^2
**= Total PCB Concentration found < 10 µg/100 cm^2 after cleaning on 1-12-15
***= RL for Sample E-1 = 5.0 µg/100 cm^2 due to higher level of PCBs present in sample, the sample required a X10 dilution which created a x10 change in the reporting limit.

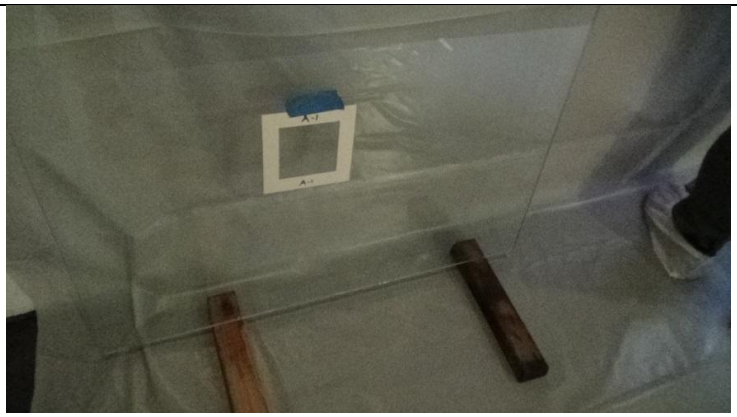
TABLE 2 Polychlorinated Biphenyls (PCBs) INTERSTITIAL WINDOW SILL FRAMING SETTLED DUST (PRE-CLEANING) NVL Batch No: 1419129		
Sample #	102714-BULK-1	102714-BULK-2
Building	Bldg. 11-200	Bldg. 11-200
Sample Location Description	Interstitial Window Sill South Window West Elevation	Interstitial Window Sill North Window West Elevation
Results in:	ppm (mg/kg)	ppm (mg/kg)
Aroclor 1016	ND	ND
Aroclor 1221	ND	ND
Aroclor 1232	ND	ND
Aroclor 1242	ND	ND
Aroclor 1248	ND	ND
Aroclor 1254	1,100.0	4,200.0
Aroclor 1260	2,000.0	7,600.0
TOTAL PCB	**3,100.0**	**11,800.0**
Reporting Limit	220.0	1,400.0
ND = None Detected (Less than RL) RL = Reporting Limit of Instrument		

TABLE 3 METALS INTERSTITIAL WINDOW SILL FRAMING SETTLED DUST (PRE-CLEANING) NVL Batch No: 1419125		
Sample #	102714-BULK-1	102714-BULK-2
Building	Bldg. 11-200	Bldg. 11-200
Sample Location Description	Interstitial Window Sill South Window West Elevation	Interstitial Window Sill North Window West Elevation
Results in:	ppm (mg/kg)	ppm (mg/kg)
Chromium	**130.0**	**130.0**
Copper	**89.0**	**80.0**
Nickel	**ND <66.0**	**ND <19.0**
Zinc	**64,000**	**32,000**
Reporting Limit	66.0	19.0
ND = None Detected (Less than RL) < = Less than #, # = RL = Reporting Limit of Instrument		

Photographs

The following photographs provide visual information and examples about the testing conditions when samples were collected. Not every sample date, location and condition is depicted:

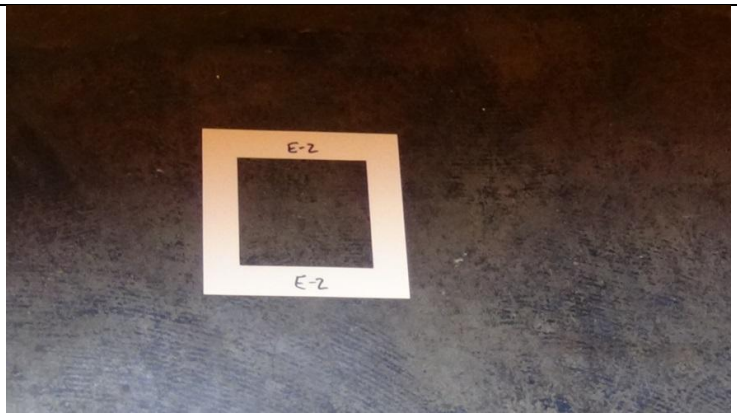
#	Photograph	Notes
1		**Unit 11-200** Preparation for removal of double paned soundproofing window necessary to access and collect sample of bulk dust trapped on exterior of double paned window, between double paned soundproofing window and original exterior single pane.
2		**Unit 11-200** South Window. Pre-sample conditions prior to double paned soundproofing window being removed. Bulk dust that was collected is seen on the sill exterior to the soundproofing wall.

3		**Unit 11-200** **PRE-Cleaning** North Window. Pre-sample conditions prior to double paned soundproofing window being removed. Removal of interior double pane window was necessary in order to access exterior sill area between double paned window and original single paned window.
4		**Unit 11-200** **PRE-Cleaning** **SURFACE "WIPE" – PCBs** Inside pane surface of "sound proofing glass" **Sample A-1** **Testing Result Summary:** **No PCBs detected.**
5		**Unit 11-200** **POST-Cleaning** **SURFACE "WIPE" - PCBs** Inside pane surface of "sound proofing glass" **Sample A-2** **Testing Result Summary:** **No PCBs detected**

6		**Unit 11-200** **PRE-Cleaning** **SURFACE "WIPE" - PCBs** Inside pane surface of "structural glass" or original exterior single pane window **Sample D-1** **Testing Result Summary:** **No PCBs detected.** Photo shows 100 cm^2 template on glass surface.
7		**Unit 11-200** **PRE-Cleaning** **Settled Dust** South Window - window sill exterior to double paned sound proofing window, between double paned and single paned window **Sample 102714-BULK-1** **Testing Result Summary:** **PCBs detected** 3,100 PPM **Metals detected** Chromium, Copper and Zinc. No Nickel detected.
8		**Unit 11-200** **PRE-Cleaning** **Settled Dust** North Window - window sill exterior to double paned sound proofing window, between double paned and single paned window **Sample 102714-BULK-2** **Testing Result Summary:** **PCBs detected** 11,800 PPM

		Metals detected Chromium, Copper and Zinc. No Nickel detected.
9		**Unit 11-200** **POST-Cleaning** View showing clean interstitial south window sill after double paned soundproofing glass re-installed.

10		**Unit 11-200** **POST-Cleaning** View showing clean interstitial north window sill after double paned soundproofing glass re-installed.
11		**Unit 10-200** **PRE-Cleaning** **SURFACE "WIPE" – PCBs** Floor in front of windows **Sample E-1** **Testing Result Summary:** **PCBs detected 27.7 µg/100 cm2** It was reported that previous testing for PCBs by the tenant was performed in the area to the right, so care was taken not to collect samples in that area to control for any cleaning effect the prior sampling may have provided.

12		**Unit 10-200** **POST-Cleaning** **SURFACE "WIPE" – PCBs** Floor in front of windows **Sample E-2** **Testing Result Summary:** **PCBs detected** **2.1 µg/100 cm2** Sample collected in area not previously tested.

Closing

This document is the sole property of NVL Laboratories and Rainier Commons, the building owner.

NVL appreciates the opportunity to provide the testing service to Rainier Commons and trust this report documenting the sample collection and results meets your needs as requested. Please contact NVL if information is needed at any time regarding the information provided in this report.

ATTACHMENTS:

- NLV Laboratories, INC. Laboratory Reports:
  - Polychlorinated Biphenyls (PCBs), SURFACE "WIPE" - Batch No: 1419115,1500682,1501497
  - Polychlorinated Biphenyls (PCBs), BULK SETTLED DUST - Batch No: 1419129
  - Metals, BULK SETTLED DUST - Batch No: 1419125

NVL Laboratories, Inc.
www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS
HAZARDOUS MATERIALS SERVICES

Client: NVL Laboratories, Inc.
Address: 4708 Aurora Ave N
Seattle, WA 98103
Attention: Mr. Marcus Gladden

Project Location: 3100 Airport Way South
Seattle, WA 98134

NVL Batch No. 1419115.00

Method No. EPA 8082
Client Project # 2012-494
Dave Received: 10/27/2014
Matrix: Wipe
Samples Received: 10
Samples Analyzed: 10

Lab Sample ID:	14134652	14134653	14134654	14134655
Client Sample ID:	A-1	A-2	B-1	B-2
Sample Description:	Inside pane surface "sound proofing glass" - S. window W. elevation - Bldg. 11-200- Before cleaning	After cleaning - South window	Inside "structural glass" - Before cleaning	After cleaning
Sample Area (cm2)	100.0	100.0	100.0	100.0
PCB Type	ug/100 cm2	ug/100 cm2	ug/100 cm2	ug/100 cm2
Aroclor 1016	ND	ND	ND	ND
Aroclor 1221	ND	ND	ND	ND
Aroclor 1232	ND	ND	ND	ND
Aroclor 1242	ND	ND	ND	ND
Aroclor 1248	ND	ND	ND	ND
Aroclor 1254	ND	ND	ND	ND
Aroclor 1260	ND	ND	ND	ND
Total: PCB Concentration	ND	ND	ND	ND
Reporting Limit (RL) :	2.0	2.0	2.0	2.0

Remarks: ug/100 cm2 = Micrograms per 100 square centimeter
Sample area based on cm2 per wipe

ND = None Detected (<RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu Analysis Date: 10/28/2014
Reviewed by: Nick Ly Reviewed Date: 10/29/2014

For: Nick Ly, Technical Director

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

RCLLC 0004889

NVL Laboratories, Inc.
www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS HAZARDOUS MATERIALS SERVICES

Client: NVL Laboratories, Inc.
Address: 4708 Aurora Ave N
Seattle, WA 98103
Attention: Mr. Marcus Gladden

Project Location: 3100 Airport Way South
Seattle, WA 98134

NVL Batch No. 1419115.00
Method No. EPA 8082
Client Project # 2012-494
Dave Received: 10/27/2014
Matrix: Wipe
Samples Received: 10
Samples Analyzed: 10

Lab Sample ID:	14134656	14134657	14134658	14134659
Client Sample ID:	C-1	C-2	D-1	D-2
Sample Description:	Inside pane - North Window - Before cleaning	Inside pane - North Window - After cleaning	Inside "structural glass" North window - Before cleaning	After cleaning
Sample Area (cm2)	100.0	100.0	100.0	100.0
PCB Type	**ug/100 cm2**	**ug/100 cm2**	**ug/100 cm2**	**ug/100 cm2**
Aroclor 1016	**ND**	**ND**	**ND**	**ND**
Aroclor 1221	**ND**	**ND**	**ND**	**ND**
Aroclor 1232	**ND**	**ND**	**ND**	**ND**
Aroclor 1242	**ND**	**ND**	**ND**	**ND**
Aroclor 1248	**ND**	**ND**	**ND**	**ND**
Aroclor 1254	**ND**	**ND**	**ND**	**ND**
Aroclor 1260	**ND**	**ND**	**ND**	**ND**
Total: PCB Concentration	**ND**	**ND**	**ND**	**ND**
Reporting Limit (RL) :	2.0	2.0	2.0	2.0

Remarks: ug/100 cm2 = Micrograms per 100 square centimeter
Sample area based on cm2 per wipe

ND = None Detected (<RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu Analysis Date: 10/28/2014
Reviewed by: Nick Ly Reviewed Date: 10/29/2014

For: Nick Ly, Technical Director

NVL Laboratories, Inc.
www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS
HAZARDOUS MATERIALS SERVICES

Client: NVL Laboratories, Inc.
Address: 4708 Aurora Ave N
Seattle, WA 98103
Attention: Mr. Marcus Gladden

Project Location: 3100 Airport Way South
Seattle, WA 98134

NVL Batch No. 1419115.00
Method No. EPA 8082
Client Project # 2012-494
Dave Received: 10/27/2014
Matrix: Wipe
Samples Received: 10
Samples Analyzed: 10

Lab Sample ID:	14134660	14134661		
Client Sample ID:	E-1	E-2		
Sample Description:	Floor in front of windows - Before cleaning	After cleaning		
Sample Area (cm2)	100.0	100.0		
PCB Type	**ug/100 cm2**	**ug/100 cm2**		
Aroclor 1016	**ND**	**ND**		
Aroclor 1221	**ND**	**ND**		
Aroclor 1232	**ND**	**ND**		
Aroclor 1242	**ND**	**ND**		
Aroclor 1248	**ND**	**ND**		
Aroclor 1254	**41.7**	**4.6**		
Aroclor 1260	**69.2**	**3.8**		
Total: PCB Concentration	**110.9**	**8.4**		
Reporting Limit (RL) :	20.0	2.0		

Remarks: ug/100 cm2 = Micrograms per 100 square centimeter
Sample area based on cm2 per wipe

ND = None Detected (<RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu Analysis Date: 10/28/2014
Reviewed by: Nick Ly Reviewed Date: 10/29/2014

FOR Nick Ly, Technical Director

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

RCLLC 0004891

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1419115

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 10
Turn Around Time ☐ 1-Hr ☐ 8-Hrs ☒ 2 Day ☐ 5
☐ 2-Hrs ☐ 12-Hrs ☐ 3 ☐ 6-10
☐ 4-Hrs ☐ 24-Hrs ☐ 4
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II) ☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK
☐ Mold/Fungus	☐ Mold Air ☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (C	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Bulk Wipe EPA 8082
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		A-1	INSIDE PANE SURFACE "SOUND PROOFING	
2			GLASS" SOUTH WINDOW WEST ELEVATION	
3			BLDG 11-200 - BEFORE CLEANING	
4		A-2	AFTER CLEANING SOUTH WINDOW	
5		B-1	INSIDE "STRUCTURAL GLASS - BEFORE CLEANING	
6		B-2	AFTER CLEANING	
7		C-1	INSIDE PANE - NORTH WINDOW - BEFORE CLEANING	
8		C-2	" " " " - AFTER CLEANING	
9		D-1	INSIDE "STRUCTURAL GLASS" NORTH WINDOW - BEFORE	
10		D-2	AFTER CLEANING	
11		E-1	FLOOR - IN FRONT OF WINDOWS - BEFORE	
12		E-2	AFTER CLEANING	
13				
14		NOTE: ☆	ALL WIPE AREAS = 100 cm²	
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DAVE LEONARD		NVL	10-27-14	12 NOON
Relinquished by	Marcus Glidden		↓	↓	14:30
Received by			NVL	10/27/14	2:30p
Analyzed by	Evelyn Ahnlu		NVL	10/28/14	15:30
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report

Total Metals

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Marcus Gladden
Project Location: 3100 Airport Way South Seattle,WA 98134

Batch #: 1419125.00
Matrix: Paint
Method: EPA 3051/6010C
Client Project #: 2012-494
Date Received: 10/27/2014
Samples Received: 2
Samples Analyzed: 2

Lab ID	Client Sample #	Elements	Sample wt (g)	RL mg / kg	Results in mg / kg	Results in ppm
14134693	102714-BULK-1	Chromium (Cr)	0.0604	66.0	130.0	130.0
		Copper (Cu)	0.0604	66.0	89.0	89.0
		Nickel (Ni)	0.0604	66.0	< 66.0	< 66.0
		Zinc (Zn)	0.0604	66.0	64000.0	64000.0
14134694	102714-BULK-2	Chromium (Cr)	0.2092	19.0	130.0	130.0
		Copper (Cu)	0.2092	19.0	80.0	80.0
		Nickel (Ni)	0.2092	19.0	< 19.0	< 19.0
		Zinc (Zn)	0.2092	19.0	32000.0	32000.0

Sampled by: Client
Analyzed by: Shalini Patel
Reviewed by: Nick Ly

Date Analyzed: 10/28/2014
Date Issued: 10/28/2014

Nick Ly, Technical Director

mg/ kg = Milligrams per kilogram
ppm = Parts per million

RL = Reporting Limit
'<' = Below the reporting Limit

Note : Method QC results are acceptable unless stated otherwise.
Unless otherwise indicated, the condition of all samples was acceptable at time of receipt.

Bench Run No: 34-1028-05

RCLLC 0004893

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1419125

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 2
Turn Around Time ☐ 1-Hr ☐ 8-Hrs ☒ 2 Day ☐ 5 ☐ 6-10 ☐ 2-Hrs ☐ 12-Hrs ☐ 3 ☐ 4-Hrs ☐ 24-Hrs ☐ 4
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

2 ANALYSES

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**		**Other Metals**
☒ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☒ All 3
☐ TCLP	☒ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☒ Chromium (C	☒ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Lead (Pb)	☒ Nickel (Ni)
					☐ Mercury (Hg)	☒ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Bulk EPA 8082
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		102714 - Bulk - 1	S. WINDOW	
2		↓ -2	N. WINDOW	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DAVE LEONARD		NVL	10/27/14	12:00
Relinquished by	↓	↓	↓	↓	14:30
Received by	Michael Kelly		NVL	10/27/14	1430
Analyzed by	Shalini Patel		NVL	10/28/14	1100
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

Analysis Report
Polychlorinated Biphenyls (PCBs)

NVL LABS INDUSTRIAL HYGIENE SERVICES

Client: NVL Field Services Division
Address: 4708 Aurora Ave. N.
Seattle, WA 98103

Attention: Mr. Marcus Gladden
Project Location: 3100 Airport Way South Seattle,WA 98134

NVL Batch #: 1419129.00
Method No.: EPA 8082
Client Project #: 2012-494
Date Received: 10/27/2014
Matrix: Bulk
Samples Received: 2
Samples Analyzed: 2

Lab Sample ID:	14134695	14134696		
Client Sample ID:	102714-BULK-1	102714-BULK-2		
Sample Description:	S. Window	N. Window		
Sample Weight (g)	0.0923	1.3903		
PCB Type	mg/Kg(ppm)	mg/Kg(ppm)		
Aroclor 1016	ND	ND		
Aroclor 1221	ND	ND		
Aroclor 1232	ND	ND		
Aroclor 1242	ND	ND		
Aroclor 1248	ND	ND		
Aroclor 1254	1100.00	4200.00		
Aroclor 1260	2000.00	7600.00		
Total: PCB Concentration	3100.0	11800.0		
Reporting Limit (RL)	220.0	1400.0		

Remarks: mg/Kg = Milligrams per kilogram
ppm = Parts per million by weight
ND = None Detected (less than RL)
<RL = Below the reporting limit of instrument

Sampled by: Client
Analyzed by: Evelyn Ahulu **Date:** 10/28/2014
Reviewed by: Nick Ly **Date:** 10/29/2014

Nick Ly, Technical Director

RCLLC 0004895

NVL Laboratories, Inc.

4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1419129

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 2
Turn Around Time ☐ 1-Hr ☐ 8-Hrs ☒ 2 Day ☐ 5 ☐ 2-Hrs ☐ 12-Hrs ☐ 3 ☐ 6-10 ☐ 4-Hrs ☐ 24-Hrs ☐ 4
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

2 ANALYSES

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**		**Other Metals**
☒ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☒ **All 3**
☐ TCLP	☒ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☒ Chromium (C	☒ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Lead (Pb)	☒ Nickel (Ni)
					☐ Mercury (Hg)	☒ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Bulk EPA 8082
☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		102714 - Bulk - 1	S. WINDOW	
2		↓ -2	N. WINDOW	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DAVID LEONARD		NVL	10/27/14	12:00
Relinquished by	↓	↓	↓	↓	14:30
Received by	Michon Kotki			10/27/14	1432
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
Tel: 206.547.0100 Emerg. Cell: 206.914.4646
1.888.NVL.LABS (685.5227) www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1419129

Client	NVL Laboratories Inc	**NVL Batch Number**	
Street	4708 Aurora Ave N Seattle, WA 98103	**Client Job Number**	2012-494
		Total Samples	2
Project Manager	Munaf Khan	**Turn Around Time**	☐ 1-Hr ☐ 8-Hrs ☒ 2 Day ☐ 5 ☐ 2-Hrs ☐ 12-Hrs ☐ 3 ☐ 6-10 ☐ 4-Hrs ☐ 24-Hrs ☐ 4 Please call for TAT less than 24 Hrs
Project Location	3100 Airport Way South Seattle, WA 98134	**Email address**	

Phone: (206) 447-0263 **Fax:** (206) 447-0299

2 ANALYSES

☐ **Asbestos Air**	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ **Asbestos Bulk**	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ **Mold/Fungus**	☐ Mold Air	☐ Mold Bulk	☐ **Rotometer Calibration**		

METALS	**Det. Limit**	**Matrix**		**RCRA Metals**	☐ All 8	**Other Metals**
☒ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☒ Chromium (C	☒ **All 3**
☐ TCLP	☒ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Lead (Pb)	☒ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cr	☐ Cadmium (Cd)	☐ Mercury (Hg)	☒ Nickel (Ni)
						☒ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Silica ☐ Nuisance Dust ☐ Respirable Dust ☒ Other (Specify) PCB's - Bulk EPA 8082

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	A/R
1		102714 - Bulk - 1	S. WINDOW	
2		↓ -2	N. WINDOW	
3				
4				
5				
6				
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10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DAVE LEONARD	[signature]	NVL	10/27/14	12:00
Relinquished by	↓	↓	↓	↓	14:30
Received by	MidonKoki	[signature]	NVL	10/27/14	1430
Analyzed by					
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.

Results report to

January 20, 2015

Mr. Munaf Khan
NVL Field Services Division
4708 Aurora Ave. N.
Seattle, WA 98103

NVL LABS
HAZARDOUS MATERIALS SERVICES
MANAGEMENT | TRAINING | LAB SERVICES
www.NVLLABS.com

Re: **NVL Batch 1500682.00**

Project Name/Number: 2012-494

Project Location: 3100 Airport Way South Seattle, WA 98134

Dear Mr. Khan,

Enclosed please find test results for sample submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with methods specified on the attached test reports.

The content of this package consists of the following:

Case Narrative & Definition of Data Qualifiers
Analytical Test Results
Applicable QC Summary
Client Chain -of-Custody (CoC)

This report package contains a total of 13 pages of analytical test results along with customer CoC and other related documents. The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director.

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103-6516

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project No.2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on microgram per $100cm^2$ for PCB samples as shown on the analytical reports.

Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
Limits	The upper and lower control limits for spike recoveries.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology
PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.

Definition Appendix

Terms

R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
ug	Microgram
ug/100cm2	Micrograms per 100 square centimeters

ORGANICS LABORATORY SERVICES

NVL LABS

Company	NVL Field Services Division	**NVL Batch Number**	**1500682.00**
Address	4708 Aurora Ave. N. Seattle, WA 98103	**TAT** 5 Days	**AH** No
		Rush TAT	
Project Manager	Mr. Marcus Gladden	**Due Date** 1/20/2015	**Time** 1:35 PM
Phone	(206) 547-0100	**Email**	marcus.g@nvllabs.com
cell	(b) (6) 3	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way South Seattle,WA 98134

Subcategory Quantitative analysis

Item Code ORG-03 8082 PCB Aroclors <Wipe>

Total Number of Samples 7 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	15003575	11215-PCB-A		A
2	15003576	11215-PCB-B		A
3	15003577	11215-PCB-C		A
4	15003578	11215-PCB-D		A
5	15003579	11215-PCB-E		A
6	15003580	11215-PCB-F		A
7	15003581	11215-PCB-G		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Midori Koike		NVL	1/13/15	1335
Analyzed by	Evelyn Ahulu		NVL	1/15/15	15:00
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Midori Koike Date: 1/13/2015 Time: 3:31 PM 1 of 1

RCLLC 0004902

ANALYSIS REPORT
Polychlorinated Biphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**7**
SDG Number	**1500682.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**01/20/2015**	Samples Analyzed*	**7**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**
		* for this test only	

Sample Number	**11215-PCB-A**	Received	01/13/2015
Lab Sample ID	15003575	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	< 0.050	01/15/2015
Aroclor-1260	0.050	< 0.050	01/15/2015
PCBs, Total	**0.050**	**<0.05**	**01/15/2015**

Comments: BLDG 11-200-South Window Sound Proofing Pane

Sample Number	**11215-PCB-B**	Received	01/13/2015
Lab Sample ID	15003576	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	< 0.050	01/15/2015
Aroclor-1260	0.050	< 0.050	01/15/2015
PCBs, Total	**0.050**	**<0.05**	**01/15/2015**

Comments: BLDG 11-200-South-Structural Park

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Sample Number	**11215-PCB-C**	Received	01/13/2015
Lab Sample ID	15003577	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	9	01/15/2015
Aroclor-1260	0.050	5.6	01/15/2015
PCBs, Total	**0.050**	**14.6**	**01/15/2015**

Comments: BLDG 11-200-South Sill

Sample Number	**11215-PCB-D**	Received	01/13/2015
Lab Sample ID	15003578	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	< 0.050	01/15/2015
Aroclor-1260	0.050	< 0.050	01/15/2015
PCBs, Total	**0.050**	**<0.05**	**01/15/2015**

Comments: BLDG 11-200-North Window-Sound Proofing Pane

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Sample Number	**11215-PCB-E**	Received	01/13/2015
Lab Sample ID	15003579	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	< 0.050	01/15/2015
Aroclor-1260	0.050	< 0.050	01/15/2015
PCBs, Total	**0.050**	**<0.05**	**01/15/2015**

Comments: BLDG 11-200-North -Structural Park

Sample Number	**11215-PCB-F**	Received	01/13/2015
Lab Sample ID	15003580	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	5.2	01/15/2015
Aroclor-1260	0.050	2.7	01/15/2015
PCBs, Total	**0.050**	**7.9**	**01/15/2015**

Comments: BLDG 11-200-North Sill

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Sample Number	**11215-PCB-G**	Received	01/13/2015
Lab Sample ID	15003581	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/15/2015
Aroclor-1221	0.050	< 0.050	01/15/2015
Aroclor-1232	0.050	< 0.050	01/15/2015
Aroclor-1242	0.050	< 0.050	01/15/2015
Aroclor-1248	0.050	< 0.050	01/15/2015
Aroclor-1254	0.050	< 0.050	01/15/2015
Aroclor-1260	0.050	< 0.050	01/15/2015
PCBs, Total	**0.050**	**<0.05**	**01/15/2015**

Comments: Field Blank. Result is based on an assumption that 100cm2 area was used.

Phone: 206.547.0100 | Fax: 206.634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103

RCLLC 0004906

NVL Laboratories, Inc.
4708 Aurora Ave. N.
Seattle, WA 98103

Phone: 206 547-0100
Fax: 206 634-1936

Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1500682**
		Project Manager:	**Munaf Khan**
QC Batch(es):	**Q242**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	01/15/2015		

Blank: BLANK-1500682

Analyte	Blank Result	Units	DF	RL	Control Limit	Qualifiers
Aroclor-1016	ND	ug/wipe	1	0.050	0.05	
Aroclor-1221	ND	ug/wipe	1	0.050	0.05	
Aroclor-1232	ND	ug/wipe	1	0.050	0.05	
Aroclor-1242	ND	ug/wipe	1	0.050	0.05	
Aroclor-1248	ND	ug/wipe	1	0.050	0.05	
Aroclor-1254	ND	ug/wipe	1	0.050	0.05	
Aroclor-1260	ND	ug/wipe	1	0.050	0.05	
PCBs, Total	ND	ug/wipe	1	0.050	0.05	

Lab Control Sample: MATRIX SPIKE-1500682

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	0.192	ug/wipe	1	0.200	96	40-140	

Lab Control Sample: LCS-1500682
Lab Control Sample Duplicate: LCS-DUP-1500682

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	0.184	ug/wipe	1	0.200	92	40-140			
	0.196			0.200	98	40-140	7	50	
Aroclor-1260	0.19	ug/wipe	1	0.200	95	40-140			
	0.204			0.200	102	40-140	7	50	

NVL Laboratories, Inc.

Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1500682

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
11215-PCB-A	15003575	Decachlorobiphenyl	89%	40-140
11215-PCB-A	15003575	Tetrachloro-m-xylene	91%	40-140
11215-PCB-B	15003576	Decachlorobiphenyl	84%	40-140
11215-PCB-B	15003576	Tetrachloro-m-xylene	90%	40-140
11215-PCB-C	15003577	Decachlorobiphenyl	87%	40-140
11215-PCB-C	15003577	Tetrachloro-m-xylene	102%	40-140
11215-PCB-D	15003578	Decachlorobiphenyl	89%	40-140
11215-PCB-D	15003578	Tetrachloro-m-xylene	93%	40-140
11215-PCB-E	15003579	Decachlorobiphenyl	92%	40-140
11215-PCB-E	15003579	Tetrachloro-m-xylene	103%	40-140
11215-PCB-F	15003580	Decachlorobiphenyl	89%	40-140
11215-PCB-F	15003580	Tetrachloro-m-xylene	103%	40-140
11215-PCB-G	15003581	Decachlorobiphenyl	85%	40-140
11215-PCB-G	15003581	Tetrachloro-m-xylene	97%	40-140
BLANK-1500682	BLANK-1500682	Decachlorobiphenyl	94%	40-140
BLANK-1500682	BLANK-1500682	Tetrachloro-m-xylene	91%	40-140
LCS-1500682	LCS-1500682	Decachlorobiphenyl	95%	40-140
LCS-1500682	LCS-1500682	Tetrachloro-m-xylene	101%	40-140
LCS-DUP-1500682	LCS-DUP-1500682	Decachlorobiphenyl	101%	40-140
LCS-DUP-1500682	LCS-DUP-1500682	Tetrachloro-m-xylene	112%	40-140
MATRIX SPIKE-1500682	MATRIX SPIKE-1500682	Decachlorobiphenyl	101%	40-140
MATRIX SPIKE-1500682	MATRIX SPIKE-1500682	Tetrachloro-m-xylene	105%	40-140

* Recovery outside limits

NVL Laboratories, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1500682** Contract: **N/A**

Determination: **8082 PCB Aroclors <Wipe>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000235	CCV1-1016-1260	PCB_2014-2-6	01/15/2015	Aroclor-1016	0.1	0.105	ug/mL	105	80-120
		PCB_2014-2-6	01/15/2015	Aroclor-1260	0.1	0.102	ug/mL	102	80-120
	CCV1- 1254	PCB_2014-2-7	01/15/2015	Aroclor-1254	0.1	0.107	ug/mL	107	80-120
	CCV2-1016-1260	PCB_2014-2-6	01/15/2015	Aroclor-1016	0.1	0.109	ug/mL	109	80-120
		PCB_2014-2-6	01/15/2015	Aroclor-1260	0.1	0.108	ug/mL	108	80-120
	CCV2- 1254	PCB_2014-2-7	01/15/2015	Aroclor-1254	0.1	0.103	ug/mL	103	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1500682

Client NVL Laboratories Inc
Street 4708 Aurora Ave N
Seattle, WA 98103
Project Manager Munaf Khan
Project Location 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number
Client Job Number 2012-494
Total Samples 7
Turn Around Time ☐ 1 Hr ☐ 6 Hrs ☐ 3 Days ☐ 10 Days ☐ 2 Hrs ☐ 1 Day ☐ 4 Days ☐ 4 Hrs ☐ 2 Days ☑ 5 Days
Please call for TAT less than 24 Hrs
Email address

Phone: (206) 447-0263 **Fax:** (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II)	☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK	
☐ Mold/Fungus	☐ Mold Air	☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (Cr	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cm	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ **Other Types of Analysis** ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's - Wipe - EPA 8082 ☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	AREA A/R
1		11215-PCB-A	BLDG 11-200-SOUTH WINDOW SOUND PROOFING PANE	100 cm²
2		B	" " " - STRUCTURAL PANE	"
3		C	" " " - SILL	"
4		D	" " " - NORTH WINDOW - SOUND PROOFING PANE	"
5		E	" " " - STRUCTURAL PANE	"
6		F	" " " - SILL	"
7		G	FIELD BLANK	
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DAVE LEONARD		NVL	1-12-15	1100
Relinquished by	DAVE LEONARD		NVL	1-13-15	1335
Received by	Max R			1/13/15	1335
Analyzed by	Evelyn Ahmlm		NVL	1/15/15	15:00
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to RL of .05 µg/WIPE NEEDED

February 2, 2015

Mr. Munaf Khan

NVL Field Services Division
4708 Aurora Ave. N.
Seattle, 98103

Re: **NVL Batch 1501497.00**

Project Name/Number: 2012-494

Project location: 3100 Airport Way South Seattle, WA 98134

Dear Mr. Khan,

Enclosed please find test results for samples submitted to our laboratory for analysis. Preparation and analysis of these samples were conducted in accordance with published industry standards and methods specified on the attached analytical report.

The content of this package consists of the following:

-Case Narrative & Definition of Data Qualifiers
-Analytical Test Results
-Applicable QC Summary
-Client Chain-of-Custody (CoC)
-NVL Receiving Record

This report package contains a total of 11 pages of analytical test results along with customer COC and other related documents.

The report is considered highly confidential and will not be released without your approval. Samples are archived for two weeks following analysis. Samples that are not retrieved by the client will be discarded after two weeks.

Thank you for using our laboratory services. If you need further assistance, please contact us at 206-547-0100 or 1-888-NVLLABS.

Sincerely,

Nick Ly, Technical Director

Enclosure: Sample Results

Case Narrative:

The following summarizes samples received on date as shown on the accompanied Chain of custody by NVL Laboratories, Inc. from NVL Field Services Division for Project No. 2012-494. Samples were logged in for PCB analysis per client request using both customer sample ID's and laboratory assigned ID's as listed on the Chain-of-Custody (CoC). All samples as received were processed and analyzed within specified turnaround time without any abnormalities and deviations that may affect the analytical results. All quality control requirements were acceptable unless stated otherwise. The conditions of all samples were acceptable at time of receipt and all samples submitted with this batch were analyzed unless stated otherwise on the CoC.

Test Results are reported based on microgram per $100cm^2$ ($ug/100cm^2$) for PCB samples as shown on the analytical reports.

Definition Appendix

Terms

% Rec	Percent recovery.
<	Below Reporting Limit(RL) or Limit of Quantitation(LoQ) of the instrument.
B	Blank contamination. The recorded results is associated with a contaminated blank.
DF	Dilution Factor
J	The reported concentration is an estimated value because something may be present in the sample that interfered with the analysis.
J1	The reported concentration is an estimated value because the laboratory control sample (LCS) is out of control limits.
J2	The reported concentration is an estimated value because the percent recovery for matrix spike is out of control limits.
J3	The reported concentration is an estimated value because the relative percent difference(RPD) for duplicate analysis is out of control limits.
J4	Percent recovery is outside of established control limits.
LCS	Laboratory Control Sample.
Limits	The upper and lower control limits for spike recoveries.
LOQ	Limit of quantitation(same as RL)
mg/kg	Milligrams per kilogram.
ND	Analyte not detected or below the reporting limit of the instrument or methodology
PPM	Parts per Million.
QC Batch Group	Quality Control Batch Group. The entity that links analytical results and supporting quality control results.

Definition Appendix

Terms

R	The data are not reliable due to possible contamination or loss of material during preparation or analysis. Re-sampling and reanalysis are necessary for verification.
RL	Reporting Limit. The minimum concentration that can be quantified under routine operating conditions.
RPD	Relative Percent Difference. The relative difference between duplicate results(matrix spike, blank spike, or samples duplicate) expressed as a percentage.
RPD Limit	The maximum RPD allowed for a set of duplicate measurements(see RPD).
SMI	Surrogate has matrix interference.
Spike Conc.	The measured concentration, in sample basis units, of a spiked sample.
SURR-ND	Surrogate was not detected due to matrix interference or dilution.
ug/m3	Micrograms per cubic meter.
ug/mL	Micrograms per milliliter
ug	Microgram
ug/wipe	microgram per wipe

ORGANICS LABORATORY SERVICES

NVL LABS

Company	NVL Field Services Division	**NVL Batch Number**	1501497.00
Address	4708 Aurora Ave. N.	**TAT**	5 Days AH No
	Seattle, WA 98103	**Rush TAT**	
Project Manager	Mr. Munaf Khan	**Due Date**	2/3/2015 **Time** 12:00 PM
Phone	(206) 547-0100	**Email**	munaf.k@nvllabs.com
Cell:	(b) (6)	**Fax**	(206) 634-1936

Project Name/Number: 2012-494 **Project Location:** 3100 Airport Way South, Seattle, WA 98134

Subcategory Quantitative analysis

Item Code ORG-03 8082 PCB Aroclors <Wipe>

Total Number of Samples 3 Rush Samples

	Lab ID	Sample ID	Description	A/R
1	15008188	12315-PCB A		A
2	15008189	12315-PCB B		A
3	15008190	12315-PCB C		A

	Print Name	Signature	Company	Date	Time
Sampled by	Client				
Relinquished by	Client				

Office Use Only	Print Name	Signature	Company	Date	Time
Received by	Maxwell Raymond		NVL	1/27/15	1200
Analyzed by	Evelyn Ahyly		NVL	1/29/15	14:30
Results Called by					
☐ **Faxed** ☐ **Emailed**					

Special Instructions:

Entered By: Shaista Khan Date: 1/27/2015 Time: 1:08 PM 1 of 1

RCLLC 0004915

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Client	**NVL Field Services Division**	Samples Received*	**3**
SDG Number	**1501497.00**	Analyzed By	**Evelyn Ahulu**
Date Reported	**02/02/2015**	Samples Analyzed*	**3**
Project Number	**2012-494**	Analysis Method	**8082A**
Location	**3100 Airport Way South Seattle, WA 98134**	Preparation Method	**3546PR (PCB)**
		* for this test only	

Sample Number	**12315-PCB A**	Received	01/27/2015
Lab Sample ID	15008188	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/29/2015
Aroclor-1221	0.050	< 0.050	01/29/2015
Aroclor-1232	0.050	< 0.050	01/29/2015
Aroclor-1242	0.050	< 0.050	01/29/2015
Aroclor-1248	0.050	< 0.050	01/29/2015
Aroclor-1254	0.050	8	01/29/2015
Aroclor-1260	0.050	5.2	01/29/2015
PCBs, Total	**0.050**	**13.2**	**01/29/2015**

Comments: BLDG 10-200-North Window sill

Sample Number	**12315-PCB B**	Received	01/27/2015
Lab Sample ID	15008189	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/29/2015
Aroclor-1221	0.050	< 0.050	01/29/2015
Aroclor-1232	0.050	< 0.050	01/29/2015
Aroclor-1242	0.050	< 0.050	01/29/2015
Aroclor-1248	0.050	< 0.050	01/29/2015
Aroclor-1254	0.050	2.6	01/29/2015
Aroclor-1260	0.050	2.1	01/29/2015
PCBs, Total	**0.050**	**4.7**	**01/29/2015**

Comments: BLDG 10-200- South Window Sill

ANALYSIS REPORT

Polychlorinated Biphenyls by Gas Chromatography

Sample Number	**12315-PCB C**	Received	01/27/2015
Lab Sample ID	15008190	Matrix	Dust Wipe
Initial Sample Size	100 cm2	Units of Result	ug/100cm2

Analyte	RL	Final Result	Analysis Date
Aroclor-1016	0.050	< 0.050	01/29/2015
Aroclor-1221	0.050	< 0.050	01/29/2015
Aroclor-1232	0.050	< 0.050	01/29/2015
Aroclor-1242	0.050	< 0.050	01/29/2015
Aroclor-1248	0.050	< 0.050	01/29/2015
Aroclor-1254	0.050	< 0.050	01/29/2015
Aroclor-1260	0.050	< 0.050	01/29/2015
PCBs, Total	**0.050**	**<0.05**	**01/29/2015**

Comments: Field Blank.Result is based on an assumption that 100cm2 area was used.

Phone: 206.547.0100 | Fax: 206.634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)
4708 Aurora Avenue North | Seattle, WA 98103

RCLLC 0004917

NVL Laboratories, Inc.
4708 Aurora Ave. N.
Seattle, WA 98103

Phone: 206 547-0100
Fax: 206 634-1936

Quality Control Results

Project Number:	**2012-494**	**SDG Number:**	**1501497**
		Project Manager:	**Munaf Khan**
QC Batch(es):	**Q250**	Analysis Method:	**8082A**
QC Batch Method:	3546PR (PCB)	Analysis Description:	Polychlorinated Biphenyls by Gas Chromatography
Preparation Date:	01/29/2015		

Blank: BLK-1501497

Analyte	Blank Result	Units	DF	RL		Control Limit	Qualifiers
Aroclor-1016	ND	ug/wipe	1	0.050		0.05	
Aroclor-1221	ND	ug/wipe	1	0.050		0.05	
Aroclor-1232	ND	ug/wipe	1	0.050		0.05	
Aroclor-1242	ND	ug/wipe	1	0.050		0.05	
Aroclor-1248	ND	ug/wipe	1	0.050		0.05	
Aroclor-1254	ND	ug/wipe	1	0.050		0.05	
Aroclor-1260	ND	ug/wipe	1	0.050		0.05	
PCBs, Total	ND	ug/wipe	1	0.050		0.05	
Surrogates:					% Rec		
Tetrachloro-m-xylene			1		87	40-140	
Decachlorobiphenyl			1		83	40-140	

Lab Control Sample: MSPK-1501497

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	% Rec Limits	Qualifiers
Aroclor-1254	0.172	ug/wipe	1	0.200	86	40-140	
Surrogates:							
Tetrachloro-m-xylene			1		76	40-140	
Decachlorobiphenyl			1		91	40-140	

Lab Control Sample: LCS-1501497
Lab Control Sample Duplicate: LCS Dup-1501497

Analyte	Blank Spike Result	Units	DF	Spike Conc.	% Rec	Limits	RPD	RPD Limit	Qualifiers
Aroclor-1016	0.2	ug/wipe	1	0.200	100	40-140			
	0.184			0.200	92	40-140	8	50	
Aroclor-1260	0.15	ug/wipe	1	0.200	75	40-140			
	0.206			0.200	103	40-140	31	50	
Surrogates:									
Tetrachloro-m-xylene			1		83	40-140			
					84	40-140			
Decachlorobiphenyl			1		86	40-140			
					89	40-140			

NVL Laboratories, Inc.

Surrogate Recovery Summary Report

Client NVL Field Services Division **SDG Number** 1501497

Project 2012-494

Customer Sample ID	Lab Sample ID	Analyte	Recovery	Limits
12315-PCB A	15008188	Decachlorobiphenyl	76%	40-140
12315-PCB A	15008188	Tetrachloro-m-xylene	75%	40-140
12315-PCB B	15008189	Decachlorobiphenyl	81%	40-140
12315-PCB B	15008189	Tetrachloro-m-xylene	73%	40-140
12315-PCB C	15008190	Decachlorobiphenyl	70%	40-140
12315-PCB C	15008190	Tetrachloro-m-xylene	65%	40-140
BLK-1501497	BLK-1501497	Decachlorobiphenyl	83%	40-140
BLK-1501497	BLK-1501497	Tetrachloro-m-xylene	87%	40-140
LCS Dup-1501497	LCS Dup-1501497	Decachlorobiphenyl	89%	40-140
LCS Dup-1501497	LCS Dup-1501497	Tetrachloro-m-xylene	84%	40-140
LCS-1501497	LCS-1501497	Decachlorobiphenyl	86%	40-140
LCS-1501497	LCS-1501497	Tetrachloro-m-xylene	83%	40-140
MSPK-1501497	MSPK-1501497	Decachlorobiphenyl	91%	40-140
MSPK-1501497	MSPK-1501497	Tetrachloro-m-xylene	76%	40-140

* Recovery outside limits

NVL Laboratories, Inc.

INITIAL AND CONTINUING CALIBRATION VERIFICATION

SDG No: **1501497** Contract: **N/A**

Determination: **8082 PCB Aroclors <Wipe>**

Run	Sample	Source	Analyzed	Analyte	True	Found	Unit	% Rec	Limits
R000243	CCV1 1016-1260	PCB_2014-2-6	01/29/2015	Aroclor-1016	0.1	0.1	ug/mL	100	80-120
		PCB_2014-2-6	01/29/2015	Aroclor-1260	0.1	0.1	ug/mL	100	80-120
	CCV1 1254	PCB_2014-2-7	01/29/2015	Aroclor-1254	0.1	0.1	ug/mL	100	80-120
	CCV2 1016-1260	PCB_2014-2-6	01/29/2015	Aroclor-1016	0.1	0.106	ug/mL	106	80-120
		PCB_2014-2-6	01/29/2015	Aroclor-1260	0.1	0.106	ug/mL	106	80-120
	CCV2 1254	PCB_2014-2-7	01/29/2015	Aroclor-1254	0.1	0.1	ug/mL	100	80-120

% Rec = Percent recovery

* = Percent recovery not within control limits

NVL Laboratories, Inc.
4708 Aurora Ave N, Seattle, WA 98103
p 206.547.0100 | f 206.634.1936 | www.nvllabs.com

CHAIN of CUSTODY SAMPLE LOG

1501497

Client: NVL Laboratories Inc
Street: 4708 Aurora Ave N
Seattle, WA 98103
Project Manager: Munaf Khan
Project Location: 3100 Airport Way South
Seattle, WA 98134

NVL Batch Number:
Client Job Number: 2012-494
Total Samples: 3
Turn Around Time: ☐ 1 Hr ☐ 6 Hrs ☐ 3 Days ☐ 10 Days ☐ 2 Hrs ☐ 1 Day ☐ 4 Days ☐ 4 Hrs ☐ 2 Days ☒ 5 Days
Please call for TAT less than 24 Hrs
Email address:

Phone: (206) 447-0263 Fax: (206) 447-0299

☐ Asbestos Air	☐ PCM (NIOSH 7400)	☐ TEM (NIOSH 7402)	☐ TEM (AHERA)	☐ TEM (EPA Level II) ☐ Other
☐ Asbestos Bulk	☐ PLM (EPA/600/R-93/116)	☐ PLM (EPA Point Count)	☐ PLM (EPA Gravimetry)	☐ TEM BULK
☐ Mold/Fungus	☐ Mold Air ☐ Mold Bulk	☐ Rotometer Calibration		

METALS	Det. Limit	Matrix		RCRA Metals		Other Metals
☐ Total Metals	☐ FAA (ppm)	☐ Air Filter	☐ Soil	☐ Arsenic (As)	☐ All 8	☐ All 3
☐ TCLP	☐ ICP (ppm)	☐ Drinking water	☐ Paint Chips in %	☐ Barium (Ba)	☐ Chromium (Cr	☐ Copper (Cu)
☐ Cr 6	☐ GFAA (ppb)	☐ Dust/wipe (Area)	☐ Paint Chips in cm	☐ Cadmium (Cd)	☐ Lead (Pb)	☐ Nickel (Ni)
					☐ Mercury (Hg)	☐ Zinc (Zn)

☒ Other Types of Analysis: ☐ Fiberglass ☐ Nuisance Dust ☒ Other (Specify) PCB's-WIPE -EPA 8082 ☐ Silica ☐ Respirable Dust

Condition of Package: ☐ Good ☐ Damaged (no spillage) ☐ Severe damage (spillage)

Seq. #	Lab ID	Client Sample Number	Comments	~~AREA~~ AIR
1		12315-PCB A	BLDG 10-206-NO2TH WINDOW SILL	100 CM2
2		" " B	BLDG 10-200-SOUTH WINDOW SILL	"
3		" " C	FIELD BLANK	—
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

	Print Below	Sign Below	Company	Date	Time
Sampled by	DAVE LEONARD		NVL	~~1-24-15~~	1100
Relinquished by	DAVE LEONARD		NVL	1-27-15	1200
Received by	Max R			1/27/15	1200
Analyzed by	Evelyn Ahulm		NVL	1/29/15	14:30
Results Called by					
Results Faxed by					

Special Instructions: Unless requested in writing, all samples will be disposed of two (2) weeks after analysis.
Results report to RL of 0.05 ug/WIPE NEEDED